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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,811

03/15/2004

Laszlo Hars

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
1109 MCKAY DRIVE, M/S-41SJ  
SAN JOSE, CA 95131

EXAMINER

DO. CHAT C

ART UNIT

PAPER NUMBER

2193

MAIL DATE

DELIVERY MODE

05/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/801,811	<b>Applicant(s)</b> HARS ET AL.	
	<b>Examiner</b> Chat C. Do	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004 and 02 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/15/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 16-17 are objected to because of the following informalities:

Re claims 16-17, the applicant is advised to number claims 16-17 in page 7 of the claim.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-23 cite a generator and method for generating a random number in accordance with a mathematical algorithm. In order for claims to be statutory, claims must either include a practical/physical application or a concrete, useful, and tangible result. However, claims 1-23 merely disclose steps/components for generating a random number without further disclosing a practical/physical application or a useful and tangible result. Therefore, claims 1-23 are directed to non-statutory subject matter.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 6, 10-11, 14-17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Weimerskirch (U.S. 6,963,888).

Re claim 1, Weimerskirch discloses in Figures 1-8 a random number generator (e.g. abstract) comprising: a plurality of cross-connected latches providing at least two latch outputs (e.g. Figures 4 and 7 wherein each of component 400-x is seen in Figure 4 part 430 which has plurality of latches); at least one input of one latch of the plurality of latches being driven by a clock signal (e.g. Figure 4 wherein the clock signal is driven all the latches in the random computation component); a first XOR that receives the at least two latch outputs as an input (e.g. XOR 750 in Figure 7); wherein said first XOR generates a mistake signal "E" when its inputs do not match from the at least two latch outputs being at different logic states (e.g. as fundamental of XOR logic gate); and wherein the mistake signal is compared with a previously stored mistake signal by a second XOR (e.g. XOR 760 in Figure 7) to determine whether to obtain a random bit from a pseudo random stream of bits (e.g. the previously stored mistake signal is achieved by the flipped input delay).

Re claim 2, Weimerskirch further discloses in Figures 1-8 an exclusive or network comprising a plurality of strings of cascaded flip-flops (e.g. Figure 4), wherein an output of each of the plurality of strings is connected to the first XOR circuit, and wherein each respective latch output of the at least two latch outputs is connected to an input of a respective string of the plurality of cascaded flip-flops (e.g. Figure 7).

Re claim 3, Weimerskirch further discloses in Figures 1-8 the plurality of strings of cascaded flip flops comprise D flip-flops (e.g. component 442 in Figure 4).

Re claim 6, Weimerskirch further discloses in Figures 1-8 if the previously stored mistake disagrees with the mistake "E" then a bit is stored in a shift register (e.g. Figure 7 with component 770).

Re claim 10, Weimerskirch further discloses in Figures 1-8 the random bit obtained from the pseudo-random stream of bits is generated by a Linear Feedback Shift Register (LFSR) (e.g. component 210 in Figure 2).

Re claim 11, Weimerskirch further discloses in Figures 1-8 the LFSR has at least 64 bits (e.g. col. 5 lines 30-50).

Re claim 14, it is a method claim of claim 1. Thus, claim 14 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 15, it is a method claim of claim 1. Thus, claim 15 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 16, it is a method claim of claim 2. Thus, claim 16 is also rejected under the same rationale as cited in the rejection of rejected claim 2.

Re claim 17, it is a method claim of claim 3. Thus, claim 17 is also rejected under the same rationale as cited in the rejection of rejected claim 3.

Re claim 20, it is a method claim of claim 6. Thus, claim 20 is also rejected under the same rationale as cited in the rejection of rejected claim 6.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 7-8, 12-13, 19, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weimerskirch (U.S. 6,963,888).

Re claim 5, Weimerskirch fails to disclose in Figures 1-8 a logical value of said previously stored mistake is stored in a flip-flop. However, the prior art of Weimerskirch discloses in Figure 2 the flip-flop is used to store a signal (e.g. either delay 115 or D flip-flop 125 in Figure 2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add a flip-flop for storing a signal as seen in the prior art's Figure 2 into Weimerskirch's invention because it would enable to delay the signal for a cycle (e.g. fundamental function of delay or general flip-flop as latch).

Re claim 7, it has same limitations cited in claim 6. Thus, claim 7 is also rejected under the same rationale as cited in the rejection of rejected claim 6.

Re claim 8, Weimerskirch further discloses in Figures 1-8 the bit is stored in the shift register when the previously stored value is a logical zero (e.g. Figure 7 with component 770).

Re claim 12, it has same limitations cited in claim 10. Thus, claim 12 is also rejected under the same rationale as cited in the rejection of rejected claim 10.

Re claim 13, it has same limitations cited in claim 11. Thus, claim 13 is also rejected under the same rationale as cited in the rejection of rejected claim 11.

Re claim 19, it is a method claim of claim 5. Thus, claim 19 is also rejected under the same rationale as cited in the rejection of rejected claim 5.

Re claim 21, it is a method claim of claim 7. Thus, claim 21 is also rejected under the same rationale as cited in the rejection of rejected claim 7.

Re claim 22, it is a method claim of claim 8. Thus, claim 22 is also rejected under the same rationale as cited in the rejection of rejected claim 8.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. U.S. Patent No. 6,480,072 to Walsh et al. disclose a method and apparatus for generating random numbers.
  - b. U.S. Patent No. 4,799,259 to Ogrodski discloses a monolithic random digital noise generator.

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- c. U.S. Patent No. 5,757,923 to Koopman Jr. discloses a method of generating secret identification numbers.

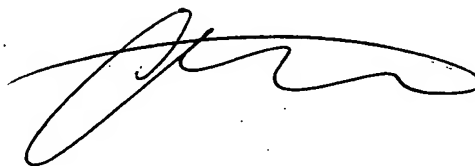
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do  
Examiner  
Art Unit 2193

April 25, 2007

A handwritten signature in black ink, appearing to be 'Chat C. Do', written over a horizontal line.